

Climatological Data for November, 1910.
DISTRICT NO. 12, COLUMBIA VALLEY.

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GENERAL SUMMARY.

Although temperatures for the month averaged slightly above the normal, there was a marked deficiency of sunshine. The weather was unusually stormy, and the month was the cloudiest November on record, the sunshine recorded being only about 12 per cent of the possible amount. The precipitation was quite well distributed throughout the month, there being no day without precipitation in some portion of the district. The snowfall in the higher levels in the interior, particularly in Idaho, Montana, and Wyoming, was considerably above the normal, and the greater portion remained on the ground, well packed, at the close of the month. The high winds along the coast caused no known damage to shipping; and although the heavy rains caused the streams to rise rapidly, and in some instances to slightly overflow their banks, no damaging floods occurred. Transportation, which had been discontinued on the upper Willamette and the Snake Rivers on account of low water, was resumed. Railroad traffic was unimpeded, and construction work proceeded without material interruption.

TEMPERATURE.

The mean temperature, as determined from the records of 229 stations, was 39.9° , which is 0.2° above the district average. The mean temperatures ranged between 28.6° at Snake River, Wyo., and 52.2° at Toledo, Oreg. The warmest sections were those west of the Cascade Mountains, and in the bottom lands of the Columbia River system, where temperatures averaged 40° and above. Mean temperatures below 32° occurred at some stations in extreme eastern sections. Throughout the greater portion of Oregon and in central Washington mean temperatures were generally below the normal.

The highest temperatures occurred generally during the first two days of the month, and the lowest were usually recorded during the second decade. The highest recorded temperature was 83° on the 1st at La Grande, Oreg., elevation 2,784 feet, and the lowest was -12° on the 27th at Salmon, Idaho, elevation 4,040 feet.

PRECIPITATION.

The average precipitation, as determined from the records of 337 stations, was 6.42 inches, which is 1.95 inch above the average for the district. Light rains occurred locally in most sections during the first three days of the month; and during the two particularly stormy periods, from the 6th to the 12th and from the 17th to the 30th, precipitation was quite general throughout the district. The heaviest precipitation occurred west of the Cascade Mountains in Oregon and Washington, in the Blue Mountains in northeastern Oregon, and in northern Idaho and central western Montana. In elevated sections in the eastern portion of the district the heavy precipitation of the last half of the month occurred in the form of snow, which, on account of the low temperatures that obtained, nearly all remained on the ground at the close of the month, and was packed solidly.

The greatest monthly precipitation was 37.02 inches at Glenora, Oreg., in the Coast drainage area, and the least was 0.43 inch at Buena Vista, Oreg., in the Snake River drainage area. The greatest 24-hour rainfall was 7 inches on the 20th at Glenora, Oreg., and the second greatest was 5.50 inches on the 21st at Goat Lake, Wash., in the Puget Sound drainage area.

THE RIVERS.

Owing to the heavy rains during the latter part of the month the rivers rose rapidly from the 25th to the 30th, the

highest stages at most stations being recorded on the 29th or 30th. The mean stages were all higher than those for October, with the exception of Northport and Wenatchee, at which points they were slightly lower.

The Columbia River averaged 1 foot above the normal for the month, being 1.5 foot above at both The Dalles and Umatilla. Compared with the October mean stage the average was 1.7 foot higher.

The Willamette River averaged 0.6 foot above the normal for November, being 1 foot above at Portland and 0.2 foot above at Salem. The Columbia River being comparatively low, the water in the lower Willamette ran out rapidly, thus preventing a higher stage being experienced at Portland than might otherwise have been expected.

The Snake River average was exactly normal, the highest stage recorded being 5.5 feet at Riparia on the 23d and the lowest 1.2 foot at Lewiston on the 7th.

A heavy rainfall at Pendleton on the 20th, accompanied by a warm wind which melted the snow on the foot hills, caused the Umatilla to rise rapidly and reach a higher stage than at any other time during the season.

On November 14 the steamer *Pomona* made the trip from Portland to Corvallis. This is the first trip of the kind to be made since June, owing to the unusually low stage of the Willamette during the summer. Freight shipments have accumulated at all points along the river, and officials of the navigation company are anxious to keep the craft in continuous service.

The steamers *City of Eugene* and *Gray Eagle* are once more plying between Salem and Oregon City, transporting pulp wood for the paper mills, after an enforced idleness since last June.

The Scandinavian-American Dredging Co. has decided to begin the work of extracting gold from the sands of the Rogue River by means of a mammoth new dredge, which is now ready to be put to work. The gravel in the river bed contains a large percentage of black sand, which carries a considerable amount of gold. The company reports that favorable results have been obtained with a dredge of small capacity during the last two years.

With the first cargo of freight sent to Lewiston by the water route since the early part of July, the steamer *Inland Empire* left Portland for the Snake River metropolis on the 29th. The Snake River is now at a good boating stage and a regular service to Lewiston will be maintained. This will include all river traffic between Celilo and points on the upper Columbia River.

MISCELLANEOUS PHENOMENA.

Thunderstorms occurred in many localities on the 21st, on which date hail was also reported at several stations in Montana, Idaho, and Oregon. Solar and lunar halos were recorded by many observers on one or more dates, many being recorded on the 13th. Sleet occurred at a few places on the 21st and 25th, and there was fog in many localities on the 1st and 2d, 13th to 16th, and 29th to 30th. Auroral displays were reported at Fall City, Oreg., on the 18th and at Paulina, Oreg., on the 2d.

The prevailing winds were from the southwest, and maximum velocities were recorded as follows: North Head, Wash., 84 miles from the southeast on the 22d; Tatoosh Island, Wash., 72 miles from the southeast on the 7th; Port Crescent, Wash., 46 miles from the southwest on the 22d; Seattle, Wash., 40 miles from the southwest on the 23d, and Walla Walla, Wash., 32 miles from the south on the 21st.

TABLE 1.—*Climatological data for November, 1910. District No. 12, Columbia Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, .01 inch or more.	Number of partly cloudy days.	Number of cloudy days.			
<i>Montana.</i>																				
Anaconda.	Deer Lodge.	5,300	9	32.6		59	2	0	27	31	2.23	+ 1.45		18.1	5	8	17		C. D. Demond.	
Bison Mountain.	Powell.	7,240	1							3.30		0.48	39.0	15	7	12	11		C. H. Anderson.	
Butte.	Silver Bow.	5,716	15	33.6	- 0.1	58	2	2	27	25	1.62	+ 0.85	0.40	12.2	7	9	5	16	J. R. Wharton.	
Columbia Falls.	Flathead.	3,100	16															Mrs. I. M. Kennedy.		
Como**.	Ravalli.	2		36.4		64	2	13	26	28	3.70		0.49	24.0	18	3	5	22	Hiram Platt.	
Dayton.	Flathead.	2,800	0															Charles Frost.		
East Anaconda.	Deer Lodge.	5,500	5	31.1		58	2	5	27	29	2.37		1.10	16.3	10	5	8	17	C. D. Demond.	
Fortine.	Lincoln.	2,975	4	33.2		53	3	11	26	27	1.67		0.42	6.7	11	5	3	22	Mike Peter.	
Hamilton.	Ravalli.	3,575	7	36.4		64	2	9	26	33	2.11		0.51	10.5	8	4	13	13	Bitter Root Valley Ir. Co.	
Hat Creek.	Powell.	6,000	1															M. K. Landreth.		
Kalispell.	Flathead.	2,965	11	34.9	+ 2.9	56	2	18	26	21	2.38		0.44	25.0	15	4	8	18	U. S. Weather Bureau.	
Lost Creek.	Deer Lodge.	5,200				62	2	11	15	33	2.03		0.80	18.5	6	11	7	12	Frank Henanit.	
McGinnis Meadows.	Lincoln.			33.1										0.61	6.2	15	3	24	H. L. Beebe.	
Missoula.	Missoula.	3,225	32	36.0	+ 3.7	60	2	11	27	27	2.35	+ 1.00	0.40	10.2	15				U. S. Weather Bureau.	
Ophir.	Powell.	8,800	1											0.48		11	4	24	E. S. Wilson.	
Ovando.	do.	4,207	10	30.0	- 0.1	60	2	10	16	30	5.34	+ 3.30	1.00	41.5	18	0	30	0	S. B. Muchmore.	
Philipsburg.	Granite.	5,275	7	33.8*		63	2	- 3	27	32	2.14		0.90	16.4	10	6*	6*	15*	G. T. Bramble.	
Plains.	Sanders.	2,475	12	35.4	+ 3.0	64	2	15	26	22	1.90	+ 0.53	0.80	5.0	5	6	0	24	M. H. Pierce.	
Pleasant Valley.	Flathead.	3,500	3	32.6		61	2	- 5	26	38	3.70		0.65	15.0	15	3	13	A. D. Stillman.		
Poison.	do.	2,920	2	37.2		65	2	16	28	28	2.54		0.90	7.0	6			F. P. Brown.		
St. Ignatius.	Missoula.	3,700	4	37.1		67	2	13	24	29	1.90		0.40	13.9	13	2	0	28	U. S. Reclamation Service.	
St. Regis.	do.	2,650	2	35.8		58	2	15	27	29	5.25		0.71	10.1	15	1	22	7	R. D. Lee.	
Saltse.	do.	3,600	6											1.98	38.0	14	3	0	E. K. Tarbox.	
Snowshoe.	Lincoln.	4,500	4	29.6		51	2	12	27	20	12.17		2.64	49.3	21	5	2	23	J. C. Ritter.	
Troy.	do.	1,880	14	39.2	+ 3.3	60	2	20	16	28	6.12	+ 1.68	1.69	10.0	16	5	3	22	W. E. Minor.	
Upper Lake McDonald.	Flathead.	3,200	2															F. F. Liebig.		
Willow Glen Stk. Frm. §§	Deer Lodge.		1	32.9		60	10	5	28	30	1.97		0.50	15.0	10	7	4	19	G. E. Luce.	
<i>Wyoming.</i>																				
Afton.	Uinta.	6,200	6	34.8	+ 3.7	67	3	- 5	27	42	0.82	+ 0.04	0.25	6.5	6	11	4	15	A. U. Call.	
Alta.	do.	7,000	1	31.4		57	11	- 10	27	39	2.03		0.40	7.4	4	11	9	18	Mrs. Lucy Brown.	
Bedford.	do.	5,900	10			61	2											W. C. Heinrich.		
Snake River.	Yellowstone Park.	7,000	4	28.6		54	2	- 11	27	35	4.60		0.90	38.0	13	9	2	19	U. S. Army.	
<i>Nevada.</i>																		Moses Jones.		
San Jacinto.	Elko.		5	34.4†		57	5	15	26	29	0.86		0.27	2.5	6	13	5	12	sw.	
<i>Utah.</i>						6	38.6			66	2	10	27	34	0.94		0.30	0.7	10	T. B. Jones.
<i>Idaho.</i>						9	37.4			71	2	11	4†	48	1.64		0.53	T.	6	w.
Albion.	Cassia.		3																G. A. Axline.	
Almo.	do.																		Wm. L. Eames.	
American Falls.	Oneida.	4,341																	O. H. Barber.	
Blackfoot.	Bingham.	4,503	15	37.0	+ 3.1	68	2	10	4†	47	0.99	+ 0.16	0.44	0.5	10	4	12	14	sw.	
Blackfoot Dam.	do.	2	32.6			60	2†	- 8	27	38	1.20		0.33	8.5	14	8	9	13	sw.	
Bock's Ranch.	Elmore.	3,500												5.10		1.10	7.8	15	William Bock.	
Bogus Creek.	Boise.	4,200												5.68		0.92	7.9	15	F. P. Ingraham.	
Boise.	Ada.	2,739	25	42.0	+ 2.4	72	2	20	26	34	2.53	+ 1.67	0.50	3.0	16	5	4	21	U. S. Weather Bureau.	
Bonners Ferry.	Bonner.	1,850		35.8		52	4	18	34†	30			0.88	6.0	11	4	2	24	W. H. Heideman.	
Boulder Mine.	Boise.	4,800	2											7.53		1.12	22.2	16	Patrick Moriarty.	
Buhl.	Cassia.	3,800	5	43.8*		71	2†	18	27	44†				4.0					H. J. Idema.	
Burke.	Shoshone.	4,082	4															W. Alvin Hall.		
Caldwell.	Canyon.	2,372	6	40.4		71	2	16	5	43	2.15		0.33	4.0	14	3	9	18	Prof. Wm. J. Boone.	
Camas.	Fremont.	4,815	2															Mrs. Edna J. Faulkner.		
Cambridge.	Washington.	2,651	14	36.7	- 0.9	70	1	11	27	43	5.67	+ 3.14	0.74	11.5					Chas. H. Shepherd.	
Cedar Creek Dam.	Twin Falls.																	H. R. Collins.		
Chesterfield.	Bannock.	5,124	15	34.0†	+ 3.4	69	10	0	27	50†	0.81	+ 0.03	0.23	1.0	6				Chas. S. West.	
Coeur d'Alene.	Kootenai.	2,157	20															Jos. T. Scott.		
Cottonwood Creek.	Boise.	4,000																Frank Hedrick.		
Crawford.	do.	4,300																Mrs. Gertrude Kerby.		
Culdesac.	Nez Perce.	1,520	3	42.2		65	2	30	15†	29	4.95		1.10		9	2	4	24	R. R. Richmond.	
Deary.	Latah.																	H. M. Call.		
Dent.	Nez Perce.	1,350	6	40.4		55	2†	28	27	20	5.83		1.37	3.8	12	3	12	15	Emil Schuessler.	
Driggs.	Fremont.	6,097	3	32.8		62	11	- 7	27	32	1.45		0.65	5.0	8	7	4	19	Walter H. Durrant.	
Edie.	do.	2	30.3			62	10	5	27	35	0.48		0.20	2.0	3	12	9	9	Geo. B. Edie.	
Edwardsburg.	Idaho.	4,500																W. A. Edwards.		
Emmett.	Canyon.	2,350	4	40.8		70	2	16	4	43	3.05		0.51	3.0	14	7	5	18	C. P. Kar.	
Flowers.	Blaine.																	U. S. Forest Service.		
Forney.	Lemhi.	13	33.8	+ 2.6		54	25	- 10	27	41	0.91	- 0.86	0.55	5.7	5	7	2	21	M. B. Merritt.	
Garden Valley.	Boise.	3,600	4											6.52		1.25	10.5	14	Mrs. Gertrude M. Ross.	
Garnet.	Elmore.	2,575	11	45.2	+ 1.3	76	2†	19	26	49			0.20		8	9	0	21	Asa A. Kenison.	
Glenns Ferry.	do.	2,569	3	42.8		74	2	12	5	50	1.76		0.57	2.5	11	8	2	20	I. E. Perkins.	
Gooding.	Lincoln.	3,572	2	39.5		70	2	14	4	42	1.72		0.73	2.9	12	6	5	19	John Krall, Jr.	
Grand Forks.	Shoshone.	3,000		35.2		59	2	21	26	25	13.34		2.40	18.1	19	7	1	22	Henry Kotkey.	
Grandview.	Owyhee.	2	42.0			73	2	14	5	48	1.28		0.45		5	7	3	10	N. G. Massey.	
Grimes Pass.	Boise.	5,200	2											7.34		1.00	21	9	Joseph M. Clarke.	
Gufey.	Owyhee.	2,381	2	44.0		75	2	20	26	39	1.73		0.41	T.	13	7	15	Fred Perry.		
Hailey.	Blaine.	5,347	7	34.6		61	2	4	27	32	2.28		0.44	14.9	13	8	7	15	U. S. Forest Service.	
Hot Springs.	Owyhee.	2,572	5	45.0		74	3	19	5†	42	1.55		0.50	5.0	7	8	8	J. M. Waterhouse.		
Idaho City.	Boise.	4,000																Mrs. Emma L. Hammer.		
Idaho Falls.	Bingham.	4,742	16	37.0	+ 5.0	62	2	10	27	35	1.09	0.00	0.40	1.5	7	10	12	8	Dr. T. M. Bridges.	
Indian Valley.	Washington.	2,999																W. E. Henke.		
Irwin.	Bingham.	6,500	2				</td													

MONTHLY WEATHER REVIEW.

NOVEMBER, 1910

TABLE I.—Climatological data for November, 1910. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, .10 in. or more.	Number of partly cloudy days.	Number of clear days.		
<i>Idaho—Continued.</i>																			
Moscow.	Latah.	2,748	18	38.0	+ 0.3	58	2	25	26†	20	3.94	+ 0.65	0.77	2.4	11	2	7	21	se.
Mountainhome.	Elmore.	3,150	5	40.2	—	71	2	10	26	41	2.41	—	0.04	5.0	12	7	20	3	w.
Murtaugh.	Cassia.	4	38.0*	—	71	3	10	27	47	1.73	—	0.42	4.5	9	—	—	—	—	—
Nez Perce \$.	Nez Perce.	3,182	2	36.3	—	65	4	12	26	41	4.39	—	0.80	16	5	0	25	s.	
Oakley.	Cassia.	4,700	18	40.5	+ 1.6	72	3	15	26†	42	0.80	0.00	0.30	T	6	14	11	5	s.
O'Hara Bar.	Idaho.	1,400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Orofino.	Nez Perce.	1,027	6	39.8	—	65	2	25	27	28	6.50	—	0.84	4.5	21	1	18	11	—
Payette.	Canyon.	2,159	20	40.4	- 0.8	67	2	17	3†	44	2.72	+ 1.52	0.39	3.0	15	6	4	20	n.
Peaceful Valley \$.	do.	2,380	—	40.1*	—	66	7†	15	26	38*	1.79	—	0.50	2.5	10	—	—	—	se.
Pebble.	Bannock.	5,277	2	34.4	—	61	10	4	27	45	1.95	—	0.80	3.9	11	10	10	sw.	
Pierson.	Custer.	6,900	—	30.8	—	60	1	—	26	49	4.44	—	1.20	14.0	7	14	1	15	s.
Pine.	Elmore.	4,100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Placerville.	Boise.	4,200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pleasant Valley.	Ada.	3,000	3	40.3	—	73	2	10	26	35	2.41	—	0.47	5.0	11	8	0	22	se.
Pocatello.	Bannock.	4,483	11	40.0	+ 3.7	66	2	15	27	31	1.32	+ 0.77	0.47	1.4	9	5	8	17	se.
Pocatello Nursery.	do.	5,396	3	33.4*	—	62	4†	2	27	52*	1.84	—	0.41	4.0	9	—	—	—	—
Poplar.	Bingham.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Porthill.	Bonner.	1,665	22	35.8	+ 2.0	51	3†	21	15	21	3.91	+ 0.57	0.91	—	18	8	0	22	—
Powers Ranch.	Boise.	4,300	—	4.76	—	—	—	—	—	—	—	—	—	—	13	12	0	18	—
Pyle Creek.	do.	3,100	2	—	—	—	—	—	—	—	—	—	—	—	7.77	13	5	8	17
Rattlesnake Creek.	Elmore.	4,000	—	—	—	—	—	—	—	—	—	—	—	—	5.45	9.7	3	5	w.
Richfield.	Lincoln.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.92	1.2	9	8	13
Roseworth.	Twin Falls.	4,400	—	37.2*	—	70	2	13*	5	44*	1.98	—	0.72	4.1	12	1	7	17	n.w.
Ruby Creek.	Boise.	—	—	—	—	—	—	—	—	—	—	—	—	—	6.95	13.3	18	2	20
Rupert.	Lincoln.	4,204	4	39.4	—	72	21	14	5	48	1.38	—	0.34	4.2	11	11	3	11	sw.
St. Maries.	Kootenai.	2,263	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Salmon.	Lemhi.	4,040	5	34.0	—	57	2	- 12	27	39	2.38	—	0.50	18.5	13	8	6	16	n.w.
Salmon River Dam.	Twin Falls.	3	40.7	—	72	2	13	26†	37	1.77	—	0.35	5.5	12	5	9	16	n.	
Sandpoint.	Bonner.	2,084	—	36.4	—	52	4†	17	26	29	7.29	—	1.64	12	1	7	22	s.	
Sheep Hill.	Shoshone.	5,000	2	—	—	—	—	—	—	—	—	—	—	—	7.49	14.0	17	—	—
Silver City.	Lincoln.	3,968	3	—	—	—	—	—	—	—	—	—	—	—	4.18	0.90	10.5	12	s.
Smith Prairie.	Owyhee.	6,280	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smith Ranger Station.	Elmore.	5,200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Soldier Creek.	Bonner.	1,080	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Springfield.	Blaine.	—	—	32.8	—	62	2	2	27	36	4.95	—	1.19	30.3	14	9	4	17	w.
Springfield.	Bingham.	4,420	2	37.4	—	68	2	8	4	47	1.51	—	0.48	1.5	6	2	13	12	sw.
Sugar \$.	Fremont.	4	33.9	—	61	2	8	27	37	1.23	—	0.32	6.0	7	7	7	16	sw.	
Sunnyside.	Elmore.	2	40.2	—	71	2	14	26	43	2.75	—	0.52	3.5	11	2	2	2	se.	
Tripod Mountain.	Boise.	4,300	—	—	—	—	—	—	—	—	—	—	—	—	7.18	1.24	16.0	17	w.
Twin Falls.	Twin Falls.	3,825	6	40.2	—	72	2	13	27	46	1.90	—	0.40	0.2	10	3	2	2	sw.
Vernon.	Fremont.	13	34.4	+ 0.5	60	2	—	27	35	2.77	+ 1.47	0.56	7.0	12	6	9	15	sw.	
Wallace.	Shoshone.	2,728	3	36.9*	—	61	2	20	27	25*	12.05	—	2.36	—	19	2	1	12	w.
Wendell.	Lincoln.	3,400	3	40.4	—	73	2	16	4	46	2.73	—	0.72	3.0	10	7	11	17	—
<i>Washington.</i>																			—
Aberdeen.	Chehalis.	162	19	45.2	- 0.5	56	1†	31	15†	20	15.31	+ 0.49	2.12	0.0	21	0	21	9	w.
Anacortes.	Skagit.	60	16	43.2	—	55	1	28	19	19	4.04	- 0.48	0.54	0.0	16	6	13	11	—
Baker.	do.	200	4	41.6	—	58	14	27	25	26	14.66	—	2.50	0.5	17	5	3	22	—
Bellingham.	Whatcom.	60	15	45.4	+ 0.4	59	1	24	34	37	5.89	+ 1.20	0.62	1.0	18	5	4	21	—
Blaine.	do.	57	13	42.4	+ 1.3	54	2†	26	25	20	9.40	+ 2.54	1.82	2.0	23	2	14	14	ne.
Blalock Island.	Benton.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Blewett.	Chelan.	2,200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bremerton.	Kitsap.	30	—	—	—	—	—	—	—	—	—	—	—	—	11.51	0.37	15.2	12	9
Brewster.	Okanogan.	1,620	35.4	—	59	7	15	26	27	2.63	—	—	—	—	—	—	—	—	se.
Bumping Lake.	Yakima.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cashmere.	Chelan.	—	—	—	—	—	—	—	—	—	—	—	—	—	4.55	1.33	15.0	14	9
Cedar River.	King.	535	3	—	—	—	—	—	—	—	—	—	—	—	10.75	2.42	T	12	6
Centralia.	Lewis.	212	17	45.2	0.0	60	1	27	24†	29	12.64	+ 3.70	2.50	0.0	26	2	12	16	s.
Cheney.	Spokane.	2,351	11	37.3	—	58	2†	23	26	26	3.46	+ 0.95	0.97	2.5	13	2	1	27	sw.
El Eium.	Kittitas.	1,930	11	35.3	- 2.2	58	1	14	25	30	5.13	+ 0.73	0.85	19.0	15	7	7	16	ne.
Clearbrook.	Whatcom.	140	7	40.6	—	50	6†	22	25	24	14.79	—	4.28	4.0	19	2	11	17	ne.
Clearwater.	Jefferson.	135	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Colfax.	Whitman.	2,300	21	40.8	+ 1.7	66	1	23	14	41	2.34	- 0.95	0.75	1.0	7	4	4	22	sw.
Colville.	Stevens.	1,635	10	37.3	+ 3.8	56	6	22	4†	30	2.62	+ 0.44	0.48	3.0	11	4	4	21	sw.
Concow.	Okanogan.	2,300	10	34.0	- 0.5	58	7	8	26	30	3.31	+ 1.40	0.56	18.5	15	7	3	21	—
Cowiche.	Yakima.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Crescent.	Lincoln.	2,250	—	35.8	- 0.7	54	7†	19	26	21	3.18	+ 0.76	—	7.0	9	5	6	19	sw.
Davenport.	do.	2,450	1	35.8	—	54	7	18	26	23	2.40	—	0.50	3.3	16	4	5	21	sw.
Dayton.	Columbia.	1,700	24	42.7	+ 2.5	66	1	28	14	26	4.15	+ 1.62	0.82	1.0	17	4	6	20	sw.
Detroit.	Mason.	30	2	44.4	—	61	1	30	15†	21	16.03	—	3.40	0.22	22	2	8	20	s.
Dixie.	Walla Walla.	5,000	1	—	—	—	—	—	—	—	—	—	—	—	9.30	1.36	10.5	19	3
Duckabush.	Jefferson.	380	2	41.4	—	66	1	26	25†	22	16.48	—	3.50	1.5	19	6	6	19	sw.
East Sound.	San Juan.	500	15	—	—	—													

TABLE 1.—Climatological data for November, 1910. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, .01 inch or more.	Number of partly cloudy days.	Number of cloudy days.		
Washington—Continued.																			
Lester.	King.	1,614	6	39.6		61	1	21	25	20	7.55		1.70	T.	15	7	2	21	e.
Lone Tree.	Chelan.	14	1	46.8		55	1†	35	24†	13	16.61		3.13	0.0	24	1	13	16	
Longmire Springs.	Pierce.	2,800	1																U. S. A. Engineer Corps.
Lost Creek.	Okanogan.	3,125	1																U. S. Forest Service.
Lucerne.	Chelan.	1,100	3																P. H. Leese.
Lyle.	Klickitat.	600	17																Mrs. Barbara Shearer.
McCumbers Ranch.	Yakima.	2,182	1																Wm. Morgan.
Merritt.	Chelan.	2,175	3																Mrs. Mary McCumber.
Mottinger.	Benton.	307	10	45.8	+ 1.7	73	1	28	5	40	1.67	+ 0.54	0.27	0.0	13	8	8	14	H. B. Smith.
Mount Pleasant.	Skamania.	650	10	44.6	- 1.3	64	1	32	27	19	10.48	+ 1.68	1.35		20	7	7	16	G. H. Mottinger.
Moxee.	Yakima.	1,000	18	39.2	0.0	68	1	17	26	40	1.53	+ 0.31	0.37	8.6	13	3	13	F. M. Grout.	
Newport.	Stevens.	2,400	36.3			54	7	23	26	53			1.28	9.8	18	1	6	23	Henry B. Scudder.
Nighthawk.	Okanogan.	3,050												17.8				Chas. M. Talmadge.	
North Head.	Pacific.	211	8	47.0	- 0.7	58	1	35	24	13	9.12	+ 2.79	1.55	0.0	23	1	4	25	Steve Nagy.
Northport.	Stevens.	1,350	11	36.8*		53	3	22	25	22†	3.30	+ 0.90	1.00		2 ^b	11 ^b	9 ^b		U. S. Weather Bureau.
North Yakima.	Yakima.	1,070	1	39.2		68	1	20	26	29	1.49		0.47	5.4	11	7	6	17	Forrest B. Phillips.
Nutland.	Klickitat.	1	42.4			68	1	27	41	30	2.63		0.38	1.2	13				J. R. Shepard.
Odessa.	Lincoln.	1,540	7	39.2		70	1	12	25	35	2.26		0.92	2.0	10	4	10	16	Wm. U. Neely.
Olga.	San Juan.	50	20	44.2	- 0.2	37	21	30	26	15	5.72	+ 0.76	1.18	0.0	16	8	16	se.	Cecil S. Willis.
Olympia.	Thurston.	200	32	44.6	+ 0.2	65	1	31	24†	19	14.41	+ 5.84	3.77	0.0	18	1	1	28	M. O'Connor.
Omak.	Okanogan.	850	1	39.0		77	7	15	14	53	1.97		0.22	4.0	16			Wm. G. Taft.	
Oroville.	do.	922	1															A. M. Dufield.	
Peola.	Garfield.	5,000																Samuel Gruell, sr.	
Pomeroy.	do.	1,500	18	42.2	+ 0.2	67	2	27	4	28	3.58	+ 1.01	0.73	T.	9	1	7	22	Peter McClung.
Point Crescent.	Clallam.	259	15	41.6	- 0.7	56	6	27	26	18	8.92	+ 1.47	2.85	0.0	19	0	11	19	U. S. Weather Bureau.
Point Townsend.	Jefferson.	80	20	44.7	- 0.4	56	10	33	25	12	1.99	- 0.69	0.48	0.0	15	3	4	23	Frank Plumier.
Pullman.	Whitman.	2,550	18	41.5†	+ 3.0	58	2†	25	3†	33	3.30	- 0.03	0.64	2.0	11	13	13	State Agricultural College.	
Quinault.	Chelan.	300	3															A. V. Higley.	
Republic.	Ferry.	2,628	10	32.8	- 0.7	54	7	11	25†	31	1.24		0.22	6.5	12	4	2	24	Geo. B. Stocking.
Rex Creek.	Chelan.	1,135	3	38.8*		56	12	25	25						7†	2†	15†		James M. Nicol.
Ritzville.	Adams.	1,825	11															Northern Pacific Ry.	
Rock Lake.	Whitman.	1,910	4	38.6		60	2	21	24	30	3.54		0.0	2.0	7	4	3	23	P. M. Ramsey.
Rosalia.	do.	2,425	18	38.4	+ 0.5	59	2	26	14	21	3.83	+ 0.73	0.76	2.0	11	3	2	25	Hans Mumun.
Russells Ranch.	Yakima.	2,370	1															Maggie M. Russell.	
Scenic Hot Springs.	King.	2,021																U. S. Weather Bureau.	
Seattle.	do.	123	19	45.5	+ 1.0	60	1	32	24	18	8.41	+ 2.61	2.25	0.0	18	0	6	24	se.
Sedro-Woolley.	Skagit.	38	13	42.9	- 1.3	57	2†	24	25	17	6.37	- 0.85	0.97	0.0	21	4	7	19	Mrs. H. L. Devin.
Sixprong.	Clallam.	1,240	3	42.2		65	1	27	25	26	2.01		0.36	5.0	12	5	2	23	C. E. Comstock.
Skagit Power Dam.	Whatcom.	304																Skagit Power Co.	
Snohomish.	Snohomish.	100	16	44.2	- 0.5	61	4	28	25	25	7.43	+ 0.02	1.53	0.0	21	3	0	27	Warren Hodge.
Snoqualmie Falls.	King.	667	11	43.1		59	1	28	24†	14	11.00	+ 1.74	2.40	0.0	22	15	0	15	O. N. Wiswell.
Snoqualmie Pass.	Kittitas.	3,000																C. E. Ingraham.	
Snyders Ranch.	Okanogan.	2,200	1															Geo. M. Snyder.	
South Bend.	Pacific.	16	15	45.4	- 2.3	61	1	30	24	19	17.13	+ 3.01	3.79	0.0	25	10	2	18	Miss Winifred Eichner.
Spokane.	Spokane.	1,943	29	39.2	+ 1.9	60	2	26	14	24	3.71	+ 1.41	0.85	4.3	19	0	1	29	U. S. Weather Bureau.
State University.	King.	1	42.4			55	1	28	24	14	8.36		1.73	0.0	20	5	4	21	University of Washington.
Stokes Ranch.	Okanogan.	2,670	1															Chas. W. Gunn.	
Sullivan Lake.	Stevens.	2,700																U. S. Forest Service.	
Summer.	Pierce.	77	2	43.0		60	20	25	24	19	8.61		1.78	0.0	21	5	7	18	H. E. Thompson.
Sunnyside.	Yakima.	740	15	39.7	- 0.1	67	1	18	26	33	1.22	+ 0.22	0.25	3.5	10	5	6	19	U. S. Reclamation Service.
Tacoma.	Pierce.	213	24	44.8	+ 0.7	62	1	28	24	20	9.65	+ 1.12	2.44	0.0	20	5	2	23	Do.
Tatoosh Island.	Clallam.	88	25	46.4	+ 0.5	59	9	36	27	17	12.98	+ 0.89	2.62	0.0	22	1	5	24	U. S. Weather Bureau.
Tieton.	Yakima.	2,000	1	34.7		56	1	12	25	23	4.79		1.06	21.9	16	6	7	17	Geo. R. Hopewell.
Tonasket.	Walla Walla.	558	3	43.2		69	1	22	4	38	1.90		0.55	0.0	15	4	5	21	Geo. A. Pitcher.
Touche Ridge.	Columbia.	2,500	1															U. S. Forest Service.	
Trinidad.	Grant.	900	6	39.3		64	7	22	26	28	1.67		0.84	1.3	12	7	7	16	Rollin J. Reeves.
Twin Sister Lakes.	Yakima.	4,500																L. F. Williams.	
Twisp.	do.	1,350	7															Elias McCrea.	
Tye.	Upper Clealum Valley.	2,000	1																
Vancouver.	Klallam.	5,300																A. A. Quarnberg.	
Vashon Island.	King.	40	21	44.3	- 0.7	60	1	30	24	12	12.34	+ 5.16	2.33	0.0	24	5	1	24	Miss Gertrude McIlvane.
Wahluk.	Grant.	410	6	42.4		65	1†	21	26	26	1.80		0.40	1.3	10	5	4	21	F. C. Koppen.
Wallace.	Okanogan.	4,000	1															G. A. Wallace.	
Walla Walla.	Walla Walla.	1,000	26	43.9	+ 1.0	68	10	29	5	31	3.69	+ 1.56	1.13	0.3	17	4	2	24	U. S. Weather Bureau.
Waterville.	Douglas.	2,624	20	30.7*	- 2.8	58	7	3	26	37					11 ^a	5 ^a	13 ^a		O. R. Hopewell.
Wenatchee.	Chelan.	1,169	11	35.8	- 1.6	58	0	19	25†	24	2.75	+ 0.55	0.84	22.0	14	5	10	Geo. A. Pitcher.	
West Branch.	Stevens.	2,600	11	36.2	+ 0.3	60	7	16	26	27	2.62	+ 0.86	0.45	1.3	12	4	4	24	U. S. Forest Service.
Wilbur.	Lincoln.	2,203	11	36.2	+ 0.3	60	7	16	26	27	2.62	+ 0.86	0.45	2.95	0.0	19	6	11	J. C. Wheeler.
Yale.	Cowlitz.	375	3	43.0		67	1	25	12	24	23.25		2.95	0.0	19	6	11	6	M. W. Zindel.
Zindel.	Asotin.	715	8	43.0		70	1	29	21	38	6.43		1.50	0.0	12	5	10	15	
Oregon.	Linn.	214	28	45.0	- 0.5	62	9	29	26	22	10.68	+ 4.78	1.60	0.0	20	1	5	24	F. M. French.
Ashland.	Jackson.	1,963	22	44.2	- 0.7	63	1	23	20	25	6.59	+ 4.15	1.60	6.0	11	3	8	19	G. G. Eubanks.
Astoria.	Clatsop.	78	48	47.5	+ 0.3	61	1	34	24	16	15.85	+ 4.80	2.19	0.0	24	5	6	18	Irving Club.
Baker City.	Baker.	3,466	20															U. S. Weather Bureau.	
Bay City.	Tillamook.	14	15	47.4	- 1.8	62	10†	29	23	25	18.38	+ 1.98	2.10	0.0	21	3	7	20	J. O. Bozarth.

TABLE 1.—Climatological data for November, 1910. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.1 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oregon—Continued.																				
Glendale.	Douglas.	1,441	5	46.4	- 0.2	68	47	30	54	38	2.92	+ 10.78	1.21	0.0	11	11	9	10	nw.	B. J. Simpson.
Glenora.	Tillamook.	575	18	43.4	- 0.3	61	1	30	147	23	37.02	+ 10.78	7.00	0.0	23	4	4	22	sw.	Mrs. Jennie Reher.
Gold Beach.	Curry.	40	8	48.6	-	72	1	31	137	32	17.49	+ 6.85	4.10	0.0	14	10	17	3	nw.	C. Dewey.
Granite.	Grant.	4,680	4																L. M. Ford.	
Grants Pass.	Josephine.	956	21	44.8	+ 0.2	68	1	22	5	36	11.26	+ 6.68	3.55	1.5	16	6	2	22	sw.	John R. Paddock.
Grass Valley.	Sherman.	2,381	8	36.2	- 2.7	60	11	14	3	37	2.73	+ 1.16	0.90	14.0	8	18	4	8	sw.	Oreg. Ry. & Navigation Co.
Grindstone.	Crook.	5,000																	Orlin C. Mills.	
Headworks.	Clackamas.	719	4	43.9	-	69	20	27	167	26	12.78	+ 1.20	1.94	0.0	21	5	1	24	sw.	Portland Water Works.
Heppner.	Morrow.	1,950	21	41.6	- 2.1	68	2	24	4	31	1.67	+ 0.33	0.54	1.2	14	7	4	19	nw.	Ralph Kenton.
Hermiston.	Umatilla.	450	3	43.4	-	69	12	20	4	36	1.73	-	0.30	T.	15	6	19	s.	C. W. Kellogg.	
Hood River.	Hood River.	300	19	40.2	- 1.9	56	5	23	12	24	7.70	+ 1.81	1.50	9.0	17	10	0	20	w.	H. L. Hasbrouck.
Huntington.	Baker.	2,165	9																J. M. Day.	
Jacksonville.	Jackson.	1,640	21	43.8	- 0.2	67	1	27	13	32	9.33	+ 5.52	2.50	2.0	12	9	2	19	sw.	E. Britt.
Joseph.	Wallowa.	4,400	21	30.4	- 4.1	60	10	26	30	39	3.39	+ 1.48	0.79	10.0	7	3	20	n.	F. F. McCully.	
Klamath Agency.	Klamath.	4,169	2	35.1	-	68	3	9	15	55	6.80	-	1.40	26.0	13	12	2	16	s.	Edson C. Watson.
Klamath Falls.	do.	4,250	15	36.4	- 3.3	60	1	4	25	38	5.18	+ 3.84	1.45	13.5	12	7	6	17	nw.	W. H. Heideman.
La Grande.	Union.	2,784	24	40.0	- 0.8	83	1	20	4	34	3.14	+ 0.99	0.72	2.8	5	3	6	21	se.	W. A. Worstell.
Lakeview.	Lake.	4,800	7																Geo. L. Horton, Jr.	
McKinzie Bridge.	Lane.	2,150	1	40.2	-	65	1	21	13	39	18.17	-	3.38	1.0	20	6	0	24	sw.	Howard W. Turner.
McMinnville.	Yamhill.	12	6	45.4	+ 0.2	63	1	29	137	27	9.53	+ 1.35	1.59	0.0	19	3	7	20	sw.	U. S. Weather Bureau.
Madras.	Crook.	1,400																	Geo. Frissell.	
Marshfield.	Coos.	4,070	4	48.8	-	69	1	30	137	30	15.01	-	2.00	0.0	20					J. H. Pruitt.
Merrill.	Klamath.	180	23	38.0	-	72	1	3	26	47	4.20	-	2.00	7.0	5	10	11	9		Mrs. Agnes Ritchson.
Mikaklo.	Gilliam.	1,600	4	40.9	-	65	1	24	47	27	2.09	-	0.02	5.0	9	6	3	21	w.	Frank Little.
Miramonte Farm.	Clackamas.	195	21	44.8	+ 1.2	82	17	30	157	22	9.53	+ 1.64	1.52	0.0	18	2	8	20	s.	G. M. Muecke.
Monroe.	Benton.	350	13	44.9	- 1.5	65	10	29	13	24	11.88	+ 2.31	1.70	0.0	20	3	4	23	sw.	L. A. Peek.
Mount Angel.	Marion.	485	24	45.6	+ 0.2	65	10	30	137	26	10.30	+ 2.97	2.72	0.0	18	9	3	18	s.	Dr. U. F. Fisher.
Mountain Park.	do.	1,440	4	38.5	-	61	1	25	13	27	16.94	-	2.10	20.5	19	1	2	27	w.	M. Markley.
Musick.	Douglas.	5,000	37.4	-		65	1	19	26	27	16.92	-	3.63	68.0	20	6	32	sw.	Alex. Lundburg.	
Newport.	Linton.	60	22	47.3	- 1.2	60	17	63	257	24	11.22	- 0.25	2.00	0.0	20	7	19	4	sw.	William Matthews.
Paisley.	Lake.	4,500	6	38.3	-	66	2	7	26	32	2.83	-	1.00	15.0	7				sw.	E. C. Woodward.
Pendleton.	Umatilla.	1,070	20																E. F. Averill.	
"P" Ranch.	do.	1,817	1	42.6	-	67	1	24	5	32	3.10	-	0.94	1.0	16	8	0	22	nw.	John P. McManus.
Prineville.	Clackamas.	3,879	15	35.0	- 1.8	58	1	14	26	22	16.17	+ 2.19	1.84	57.0	22	6	4	20	sw.	O. C. Yocom.
Prospect.	Multnomah.	57	38	46.8	+ 0.7	65	9	34	15	23	8.24	+ 1.59	1.87	0.0	20	1	3	26	se.	U. S. Weather Bureau.
Harney.		4,300																	J. P. Jefferson.	
Crook.		2,864	13	39.2	- 2.5	71	1	13	4	47	3.24	+ 2.18	1.07	3.5	11	7	1	22		Geo. White.
Jackson.		2,750	4	40.7	-	74	1	19	26	56	13.16	-	3.30	9.5	15	6	8	16	nw.	E. F. Graham.
Ramsey.	Wasco.	1,350		37.8	-	65	20	20	26	25	3.77	-	0.77	17.9	15	6	5	19	w.	Mrs. Iva B. Collins.
Range.	Grant.	3,500	1	38.6	-	69	1	15	8	48	2.38	-	0.86	T.	12	9	4	17		Craig Thom.
Richland.	Baker.	2,350	8	39.0	+ 0.4	67	1	18	37	39	2.60	-	0.38	6.5	15	4	4	22	sw.	C. G. Morgan.
Riverside.	Malheur.	3,000	11																Mrs. Leah Fairman.	
Roseburg.	Douglas.	523	33	46.0	- 0.4	67	10	28	26	27	9.15	+ 4.67	3.06	0.0	21	0	11	19	s.	U. S. Weather Bureau.
Salem.	Marion.	120	20	45.5	- 1.5	65	20	31	26	22	8.03	+ 1.23	1.82	0.0	18	2	3	25	sw.	M. P. Baldwin.
Siskiyou.	Jackson.	4,115	1	39.6	-	69	1	17	26	29	11.40	-	2.47	33.0	14	7	1	22	s.	U. S. Weather Bureau.
Sparta.	Baker.	4,150	17																Hon. J. A. Wright.	
Stafford.	Clackamas.	400	13	45.6	+ 0.3	65	1	30	26	27	11.29	+ 1.24	2.14	0.0	19				John P. Gage.	
The Dalles.	Wasco.	112	35	38.2	- 4.0	67	1	27	13	25	4.18	+ 1.98	0.53	5.0	16	6	3	21	sw.	S. L. Brooks.
Toledo.	Linton.	75	20	52.2	+ 4.0	70	1	36	26	29	14.70	+ 2.29	2.00	0.0	13	10	10	19	sw.	C. B. Crosno.
Umatilla.	Umatilla.	340	14	43.6	+ 0.2	67	1	21	4	36	1.76	+ 0.59	0.42	T.	10	9	4	17	w.	Mrs. Helen T. Duncan.
Vale.	Malheur.	2,242	18	39.6	+ 2.5	65	17	13	5	43	2.05	+ 1.67	0.39	7.0	17	10	6	14	nw.	H. P. Osborn.
Van.	Harney.	3,506	4																Geo. Howe.	
Wallace Orchard.	Polk.	170	1	44.7	-	61	1	27	15	27	9.21	-	1.91	0.0	18	0	10	20		Chas. A. Parks.
Wallowa.	Wallowa.	2,935	7	36.8	-	67	21	16	27	38	3.57	-	0.86	10.5	17	3	1	26	nw.	L. J. Coverstone.
Wasco.	Wasco.	1,263	2	43.3	-	65	1	29	26	25	3.27	-	0.43	11.0	13	8	4	18	w.	A. J. Swift.
Warmspring.	Crook.	1,200	8	40.4	-	64	1	19	4	32	4.04	-	0.80	4.0	12	6	3	21	sw.	C. C. Covey.
Weston.	Umatilla.	1,800	20	41.3	+ 0.6	72	1	23	13	38	3.77	+ 0.52	0.75	1.5	18	2	3	25	se.	M. A. Baker.
Williams.	Josephine.	1,308	17																J. M. John.	
Yonna.	Klamath.	3	35.6	-		68	1	-10	25	49	6.52	-	1.74	20.5	11	7	10	13	s.	Jacob Rueck.

*, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

* Precipitation included in that of the next measurement.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

‡ Separate dates of falls not recorded.

§ Data are from standard instruments not supplied by the U. S. Weather Bureau.

\$ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

|| Estimated by observer.

II Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 12, Columbia Valley.*

TABLE 2.—*Daily precipitation for November, 1910. District No. 12—Continued.*

TABLE 2.—*Daily precipitation for November, 1910. District No. 12—Continued.*

TABLE 2.—*Daily precipitation for November, 1910. District No. 12—Continued.*

Stations.	River basins.	Day of month.																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.			
Oregon—Continued.																																			
Eugene.	do.	.15	.01			.11	.80	.00	.12	.14	.93	.40							.62	.27	.01	.60	.41	.45				.40	.168	.1.41		10.51			
Fairview.	Coast.																																17.38		
Flat City.	Willamette.	.24	.31			.31	.203	.35	.250	.280	.19	.01							.51	.66	.21	.29	.200	.37										18.59	
Fir Glen.	Coast.																																14.98		
Florence.	do.	.26	.23	T.	.01	.17	.1.92	.99	.1	.25	.2.73							.24	.63	.06	.29	.98	.55	.96	.07	.04								17.30	
Forest Grove.	Willamette.	.19	.15			.21	.1.11	.52	.1	.55	.2	.28	.03							.82	.88	.1	.02	.1.87	.02	.13									13.76
Fort Rock.	Interior.																																3.40		
Galice.	Rogue.	T.																															16.74		
Gardiner.	Umpqua.	.41																															21.37		
Glencoe.	Columbia.																																1.77		
Gibbon.	Umatilla.	.05																															5.77		
Glendale.	Umpqua.																																2.92		
Glenora.	Coast.	.40	.24			.20	.05	.4	.00	.48	.4	.25	.4	.05	.16				.10	.1.26	.2	.09	.7	.00	.1.88	.1	.97	.55			37.02				
Gold Beach.	Rogue.	.09																															17.49		
Granderonde.	Coast.	.01																															10.12		
Granite.	John Day.																																		
Grants Pass.	Rogue.																																11.26		
Grass Valley.	John Day.																																2.73		
Greenhorn.	Snake.	.03	T.																														9.01		
Grindstone.	Deschutes.																																		
Gumboot.	Snake.																																		
Gurdane.	Columbia.																																2.55		
Happy Home.	Unipqua.	.10																															21.23		
Hay Creek.	Deschutes.																																3.52		
Hazel Dell.	Willamette.	.15																															11.33		
Head Works.	do.	.43	.35			.50	.1	.34	.53	.1	.28	.1	.94	.12	.19				.40	.10	.15	.48	.38	.1	.70	.38	.10	.41	T.	.2	.65	.1	.27		
Heppner.	Columbia.	.01																															1.67		
Hermiston.	Umatilla.																																		
Hillgard.	Grande Ronde.	.10																															3.08		
Hood River.	Columbia.	.10																																	
Hoover.	Willamette.	.29																															18.85		
Howardville Station.	Grande Ronde.	.09	.03																														6.22		
Huntington.	Snake.																																		
Iber Mine.	John Day.																																		
Ironside.	Rogue.																																		
Jacksonville.	do.																																		
Joseph.	Grande Ronde.																																		
Klamath Agency.	Klamath.	*	*																														6.90		
Klamath Falls.	do.																																		
La Grande.	Grande Ronde.																																		
Lakeview.	Pitt.																																		
Lilyglen.	Rogue.																																		
Long Creek.	John Day.																																7.75		
Long Valley.	Pitt.																																4.78		
McKenzie Bridge.	Willamette.	.16	.34			.11	.1.96	.1	.65	.4	.26	.38	.02						.63	.15	.10	.22	.1	.30	.1	.99	.20			18.17					
McMinnville.	do.	.02	.20			.24	.94	.30	.1	.59	.1	.42	.02						.15	.44	.19	.64	.1	.12	.79	.04					9.32				
Madras.	Deschutes.																																		
Maury.	do.																																5.85		
Meacham.	Umatilla.																																		
Merrill.	Interior Drainage.																																4.20		
Metolius.	Deschutes.																																		
Mirkalo.	John Day.																																		
Miller Prairie.	Columbia.																																		
Miramonte Farm.	Willamette.																																		
Monroe.	do.																																		
Mountain Home.	Columbia.	.02	.48	.38		.70	.38	.1.08	.55	.178	.2	.22	.05						.42	.30	.08	.32	.00	.1	.35	.28	.07				15.26				
Mount Angel.	Willamette.	.31				.05	.65	.1	.05	.55	.75	.2	.72	.12					.10	.71	.25	.58	.77	.11	.10		.02			10.30					
Mount Hood.	Columbia.	.15				T.																													
Mountain Park.	do.	.17	.60																																
Mountain Ranch.	Rogue.																																		
Musick.	Umpqua.	.22	.10																																
Newport.	Coast.	.30	.08																																
Ochoco.	Deschutes.																																		
Ochoco Creek.	do.																																		
Owyhee.	SE. Drainage.																																		
Paulina.	Umatilla.																																		
Pandleton.	Malheur.																																		
Persist.	Rogue.																																		
Pilot Rock.	Umatilla.	.02	.02	.01																															
Plush.	SE. Drainage.																																		
Pompeii.	Columbia.	.27	.48			.05	.84	.1	.04	.1	.40	.47	.25	.10					.05	.97	.60</td														

TABLE 2.—*Daily precipitation for November, 1910. District No. 12—Continued.*

TABLE 3.—Maximum and minimum temperatures at selected stations, November, 1910. District No. 12, Columbia Valley.

Date.	Montana.				Idaho.																Vernon.				Wallace.																			
	Kalispell.		Missoula.		Afton, Wyo.				Boise.				Bonners Ferry.				Hot Spring.				Lewiston.				Mackay.				Meadows.				Pocatello.				Salmon.				Shoshone.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
1.....	47	33	45	33	55	24	64	37	50	30	66	34	57	43	60	20	55	20	60	33	53	33	.....	.....	.....	.....	48	30	49	38	.....	.....	.....	.....						
2.....	56	37	60	37	63	21	72	38	50	37	73	31	66	41	60	26	52	26	66	36	57	24	.....	.....	.....	.....	60	25	61	36	.....	.....	.....	.....						
3.....	48	34	55	34	56	30	54	33	50	30	74	39	57	35	54	34	49	32	59	35	51	28	.....	.....	.....	.....	52	35	46	32	.....	.....	.....	.....						
4.....	48	27	42	30	43	10	50	26	52	22	52	25	53	31	45	31	38	15	48	18	47	18	.....	.....	.....	.....	43	15	44	31	.....	.....	.....	.....						
5.....	42	24	49	24	43	9	57	27	44	26	58	19	53	34	47	23	49	15	53	20	47	26	.....	.....	.....	.....	46	19	49	29	.....	.....	.....	.....						
6.....	51	37	52	37	61	18	56	36	51	35	62	39	54	47	47	22	50	34	61	37	48	27	.....	.....	.....	.....	53	24	52	38	.....	.....	.....	.....						
7.....	50	40	53	34	56	23	63	44	51	41	52	45	55	47	55	23	50	39	60	41	54	36	.....	.....	.....	.....	56	26	50	42	.....	.....	.....	.....						
8.....	50	34	50	38	57	43	59	41	50	31	64	30	50	45	47	27	49	35	57	39	53	34	.....	.....	.....	.....	50	42	47	35	.....	.....	.....	.....						
9.....	40	32	43	33	50	25	57	34	42	30	64	33	47	38	47	24	45	27	55	36	40	22	.....	.....	.....	.....	43	22	40	32	.....	.....	.....	.....						
10.....	39	32	52	34	60	33	68	46	49	30	67	47	53	46	46	30	48	32	64	44	54	33	.....	.....	.....	.....	59	32	62	35	.....	.....	.....	.....						
11.....	47	38	51	41	59	22	61	41	51	40	68	50	50	43	45	29	49	30	64	45	50	30	.....	.....	.....	.....	60	32	47	40	.....	.....	.....	.....						
12.....	48	34	45	38	55	29	54	34	44	29	58	39	49	37	44	38	45	32	54	38	40	20	.....	.....	.....	.....	53	40	47	35	.....	.....	.....	.....						
13.....	40	24	44	22	49	25	52	28	40	18	45	30	47	33	43	36	45	34	42	30	48	27	.....	.....	.....	.....	50	33	43	32	.....	.....	.....	.....						
14.....	40	23	42	22	54	15	41	37	43	19	39	39	30	43	21	42	24	44	30	48	21	21	21	53	23	37	32									
15.....	36	26	37	20	47	15	41	31	45	24	45	34	41	35	45	20	41	25	34	30	38	21	.....	.....	.....	.....	44	24	30	23	.....	.....	.....	.....						
16.....	32	27	35	24	41	19	41	30	40	24	46	31	44	37	40	19	32	24	35	22	34	27	.....	.....	.....	.....	31	27	36	23	.....	.....	.....	.....						
17.....	32	23	33	26	36	24	43	34	36	27	48	33	47	37	40	20	35	29	37	26	35	26	.....	.....	.....	.....	32	21	39	30	.....	.....	.....	.....						
18.....	36	30	37	28	45	26	52	34	35	29	46	36	42	34	40	20	37	32	31	28	31	21	.....	.....	.....	.....	38	30	38	31	.....	.....	.....	.....						
19.....	40	26	47	29	34	24	45	32	40	25	48	34	44	31	41	24	38	23	48	28	44	29	.....	.....	.....	.....	33	21	37	31	.....	.....	.....	.....						
20.....	37	32	57	30	39	12	48	36	40	31	50	30	48	38	43	18	36	26	44	27	44	27	.....	.....	.....	.....	33	21	40	33	.....	.....	.....	.....						
Mns.	40.2	29.6	43.2	28.7	47.5	22.2	49.9	34.2	43.7	27.9	55.9	34.1	48.4	37.4	45.1	23.6	41.3	26.4	49.0	30.9	43.2	24.9	.....	.....	.....	.....	43.8	25.1	42.4b	31.4b	.....	.....	.....	.....						

Washington.

Date.	Aberdeen.		Blaine.		Colville.		Kosmos.		Lakeside.		North Head.		North Yakima.		Odessa.		Port Crescent.		Seattle.		Sixprong.		Spokane.		Tacoma.		Tatoosh Island.					
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1.....	56	47	51	47	48	38	56	45	52	46	58	51	66	38	70	42	53	46	60	52	65	48	42	62	49	53	50	60	45	52	42	
2.....	56	44	54	46	50	40	50	44	59	44	54	44	59	33	69	36	55	41	53	45	61	38	60	36	53	45	52	43	52	43	44	
3.....	54	35	50	40	48	32	50	36	58	35	52	46	58	29	59	29	49	34	50	46	58	38	52	38	52	43	49	44	52	43	45	
4.....	55	42	48	31	52	22	52	41	53	31	55	42	54	27	56	21	46	32	49	34	54	28	52	34	49	37	52	34	49	37	52	44
5.....	54	43	47	38	43	23	55	33	47	34	50	47	43	27	59	26	53	40	49	42	52	31	49	38	53	38	49	38	49	38	53	45
6.....	55	48	52	46	56	34	50	32	62	33	51	49	54	28	54	35	56	46	55	47	62	44	53	46	56	53	50	45	51	46	50	
7.....	55	44	52	45	54	35	51	45	61	34	52	48	55	44	59	45	52	37	54	44	64	46	57	44	55	41	51	45	50	41	52	
8.....	49	45	48	40	54	30	49	35	50	35	50	43	50	36	57	35	47	31	46	41	53	41	48	45	40	48	41	45	41	48	41	
9.....	56	36	42	39	44	26	51	36	39	32	53	42	50	30	52	30	44	34	53	40	55	46	56	37	56	39	43	41	47	41	44	
10.....	52	42	54	40	42	32	51	41	43	32	53	44	46	34	54	35	53	40	55	46	56	44	58	47	54	50	52	44	52	44	44	
11.....	53	36	52	41	48	38	48	39	51	37	51	45	52	35	49	39	48	37	52	50	44	40	48	39	53	42	46	42	48	46	46	
12.....	52	33	48	37	42	27	46	38	44	30	51	40	52	26	41	27	47	31	50	59	29	43	36	45	33	44	42	47	43	43	43	
13.....	44	32	45	31	44	32	49	29	38	33	48	40	46	26	43	21	43	30	46</													

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 12—Continued.*